Utilities Capital Project PDMM Compliance Audit

October 2017
Report # 17-006

Internal Audit Office, Administration Department
Audrey Evins, City Auditor, CPA, CFE
Viola M. Perea, Internal Auditor, CIA
Utilities Capital Project PDMM Compliance Audit
Report #17-006

EXECUTIVE SUMMARY

In accordance with the FY17 Las Cruces Utilities (Utilities) annual audit plan, the Internal Audit Office completed a compliance audit of City Manager Policy # 1.17, Project Development and Management Manual (PDMM). The purpose of the PDMM is to establish a consistent method and approach for managing capital projects that follows best practices and mitigates potential risk through proper documentation, as well as to govern the processes and procedures that pertain to the planning and implementation of capital projects. At the request of the Utilities Director, a review of project financial and reporting activities was also completed.

The focus of this audit was limited to compliance with PDMM requirements identified as applicable to a project via the Project Charter (Charter). The Charter is a document that formally authorizes a project, defines expectations and requirements, and serves as a guide for the effective and efficient completion of a project. It is the key document used to measure compliance with the PDMM. The validity of the selected requirements for each project was not assessed during this process.

CONCLUSION AND RECOMMENDATION

We concluded that Utilities did not comply with Charter requirements and did not effectively monitor project activities. We recommend a full review and revision of the PDMM to confirm its purpose as well as project evaluation and review processes for the improvement of project management.

Additional recommendations to improve the effectiveness of the PDMM and the achievement of consistent and effective project management begin on page 4.

AUDIT OBJECTIVES

- Determine if Utilities capital projects comply with PDMM Charter requirements.
- Determine the accuracy, completeness, and timeliness of financial and reporting activities.

SUMMARY OF OBSERVATIONS

Utilities project files were not in compliance with Charter requirements. Management does not self-monitor compliance with the PDMM and does not audit files for compliance with the Charter. We found that Charters were not consistently authorized, files did not contain Project Management Plans, and at least 38% of applicable Charter requirements were incomplete or were not found in project files.

Utilities staff did not effectively monitor project activities. Management did not have a project evaluation or review process in place to identify issues requiring
corrective measures. We found time delays, inconsistencies, and errors in the financial and reporting documentation reviewed.

NOTE: The PDMM is not fully utilized and may not be followed for some Utilities projects. It contains vague direction and allows the ability to vary processes and procedures, which does not support the PDMM's purpose of providing a consistent process for project management. This may create opportunities to omit value-added steps necessary for effective and efficient project management and risk mitigation.

BACKGROUND

In November 2011, the City contracted with MolzenCorbin, Engineers, Architects, Planners, for approximately $145,000, plus contingency, to create Edition I of the PDMM. With input from City staff, the document was completed in September 2013 and became a City Manager Policy effective April 2015.

SCOPE AND METHODOLOGY

Three FY16 / FY17 Utilities projects with Purchase Orders totaling $797,322.27 were selected for testing: a well drilling, waterline extension, and rock wall construction. Interviews were conducted and project files were obtained from Utilities RES/TS project management staff. Documentation found in the project files and downloaded from the City's ERP system (MUNIS) were analyzed to determine compliance with individual Charters and identify financial and reporting issues.

We would like to extend our appreciation to Utilities staff for their assistance and cooperation during this review. We are available to answer questions you may have.

MANAGEMENT RESPONSE

Management concurs with all the observations. Processes have been implemented to correct the deficiencies and fully utilize the PDMM. The complete, thorough and professional approach by the Auditor is acknowledged and appreciated.

Audrey Evins, CPA, CFE  
City Auditor

Joe Anzivino, CIA  
Internal Audit Manager

Viola M. Perea, CIA  
Internal Auditor

Cc: City Manager's Office

Dr. Jorge Garcia  
Utilities Director

Carl Clark  
RES/TS Administrator
OBSERVATIONS, RECOMMENDATIONS, AND MANAGEMENT RESPONSES

**OBSERVATION #1**: Project files were not in compliance with PDMM Charter requirements.

**CRITERIA**

- **PDMM Section 2.3: Planning Phase - Project Charter**: The Charter defines the key elements of the project, identifies requirements, and helps manage project scope and reduce rework. It uniquely defines expectations on any given project and becomes the key document used to measure compliance with the PDMM. The Charter formally authorizes a project and includes components of the Project Management Plan for Project Sponsor approval.

- **Project Charter, Article I and Paragraph 4**: Develop a Project Management Plan and submit to the Project Sponsor for approval. Commencement of activities will begin upon approval of the plan. Once the project commences, work will be performed according to the schedule provided in the approved plan.

- **Project Charter, Paragraph 6: Project Documentation**: The Charter provides an outline of PDMM requirements. Staff are asked to check all that do and do not apply, add additional requirements if needed, and initial requirements as they are completed and ready for archiving.

**CONDITION**

Management does not self-monitor compliance with the PDMM and does not audit files for compliance with the Charter.

**Project Authorization / Charter Signatures**

- All 3 project files contained a Charter, but 2 Charters were either not signed or were signed months after the project’s start date.

**Project Management Plans**

- None of the 3 project files contained a Project Management Plan, but all 3 Charters indicated work had been completed or was in progress.

**Project Charter Requirements**

- All 3 Charters reflected the same 30 requirements, but test work showed that 38%, 42%, and 60% of those requirements were either incomplete or were not found in files.

**NOTE**: Despite the various types of projects tested, the same abbreviated version of the Charter (or a "one size" fits all approach) was used to define the 3 projects. This may have the potential to diminish the effectiveness of the Charter as a control over
the project schedule and costs. The validity of the requirements marked as applicable or not applicable to the projects were not assessed during this audit.

**Observation #1 Summary**

Charters were not consistently signed to indicate authorization prior to the start of the projects, Project Management Plans were not on file to authorize commencement of the projects, and test results showed at least 38% of Applicable requirements were incomplete or were not found in project files.

**Recommendation #1**

Management and staff should consider a complete review of the PDMM to assess potential benefits and provide clear guidance for how and when it should be used. Project management staff should be trained on its use.

**Management’s Response**

Management concurs with the observations and recommendations. Processes are now in place to address these deficiencies. Projects are now fully utilizing the PDMM and an assessment will be made on costs and benefits of full utilization. Training will be scheduled within 60 days.

**Responsible Party**

Dr. Jorge Garcia, Utilities Director
Carl Clark, RES/TS Administrator

**Implementation Date**

Immediate
Training within 60 Days
**Observation #2:** Utilities staff did not effectively monitor project activities.

**CRITERIA**

- **PDMM Section 2.7: Closeout Phase – Administrative Closeout:** All project systems administratively close down at the end of the Closeout Phase. Records must be up-to-date and original documents in the project files all together.

- **PDMM Section 2.7: Closeout Phase – Project Certification Form:** Acknowledges that the procedures required by the Charter have been completed, that deviations, substitutions, alterations, and additions were authorized and noted, and that supporting documentation has been archived.

**CONDITION**

Management did not have a project file evaluation or review process in place.

**Griggs-Walnut Drill and Construct Monitoring Wells 14-15-124A**

- Inconsistencies between Charter requirements and documentation on file
- Untimely submission / approval of Pay Applications and Field Notice
- Inconsistencies / Incomplete Data:
  - Incomplete Pre Bid documentation packet
  - Construction Schedule on file, but no evidence of approval
  - Date variations in reporting periods submitted via payment packets
- Delays in processing financial activities: Contract Time 30 Working Days
  - Approx. time to complete project and financial activities: 11 months
    - Start date: 08/18/15
    - Substantial Completion: 09/15/15
    - Final Payment: 04/15/16
    - PO disencumbered (closed): 07/13/16

**Picacho Avenue 12-Inch Waterline Extension 15-16-010**

- Inconsistencies between Charter requirements and documentation on file
- Untimely submission / approval of Pay Applications, Field Notices, and CO’s
- Inconsistencies / Incomplete Data:
  - Incomplete Pre Bid documentation packet
  - Construction Schedule on file, but no evidence of approval
  - Date variations in reporting periods submitted via payment packets
- No purchase receipt for $3,600 worth of stored materials reimbursed on RFP#1
- Calculation errors between contract days used and days remaining
- Delays in processing financial activities: Contract Time 120 Working Days
  - Approx. time to complete project and financial activities: 14 months
    - Start date: 01/27/2016
    - Substantial Completion: 05/19/2016
    - Final Payment: 02/11/2017
    - PO disencumbered (closed): 03/23/2017
Jornada Water Tank Rockwall 15-16-030A

- Inconsistencies between Charter requirements and documentation on file
- Untimely submission / approval of Pay Applications and Change Order
- Inconsistencies / Incomplete Data:
  - Incomplete Pre Bid documentation packet
  - Construction Schedule on file, but no evidence of approval
- Calculation errors between contract days used and days remaining
- Delays in processing financial activities: Contract Time 80 Working Days
  - Approx. time to complete project and financial activities: 13 months
    - Start date 06/09/2016
    - Substantial Completion 09/20/2016
    - Final Payment 07/06/2017
    - PO disencumbered (closed) Not as of 07/26/2017

Observation #2 Summary

Inconsistencies, errors, and time delays were found in project file documentation.

Recommendation #2

Ongoing review and monitoring processes should be mandatory to identify and correct errors and ensure compliance and timely completion of requirements. Incorporating PDMM guidance currently not used, such as Quality and Risk Management Plans, Project Certifications, and Lessons Learned Evaluations, can help ensure projects are completed as designed, on budget, and on time. This guidance can be used to recap problems and solutions, identify training opportunities, and manage timelines and budgets that might prevent costly mistakes in future projects.

Management’s Response

Management concurs with the observations and recommendations. Processes are now in place to address these deficiencies. Projects are now fully utilizing the PDMM and an assessment will be made on costs and benefits of full utilization. Training will be scheduled within 60 days.

Responsible Party

Dr. Jorge Garcia, Utilities Director
Carl Clark, RES/TS Administrator

Implementation Date

Immediate
Training within 60 Days
**Observation #3:** The PDMM is not fully utilized, may not be followed for some projects, and has not been subject to ongoing review and revision by the PDMM Committee.

**CRITERIA**

- **CMP # 1.17 Project Development & Management Manual (PDMM):** The PDMM will govern the processes and procedures as they pertain to the planning and implementation of City-wide capital projects. The purpose is to establish a consistent method and approach to manage capital projects and it is the responsibility of all departments that engage in capital projects to implement and adhere to the processes and procedures as outlined within the PDMM.

  The Public Works Director (or designee) is responsible for establishing a committee of representatives from different departments, including Utilities. The committee is expected to meet, discuss, and review any proposed changes, concerns, or issues. The Committee Chair will recommend to the City Manager’s Office proposed changes to the PDMM for adoption.

- **PDMM: Introduction:** The Public Works and Utilities Departments have the responsibility to apply the principles of project management consistently to the City’s project development processes. Standardization of project management methodology provides common standards to ensure projects are conducted in a disciplined, well-managed and consistent manner.

  The PDMM, which will be followed to manage City projects, will require periodic evaluation and editing by the user departments. It is intended that this manual be updated and function as a living document, changing to meet the needs of the City, and remain aligned with industry-standard principles and practices.

**CONDITION**

Language in the PDMM is contradictory and provides the opportunity to vary the application of policies and procedures. Staff indicated there are gray areas and sections in the PDMM that are project dependent. As such, they felt it was not clear if the PDMM should be followed for all types of projects. Utilities follows the PDMM for all capital improvement projects, but it may not be followed for smaller projects.

**Utilization of the PDMM**

Despite the different types of projects reviewed, all 3 Charters were nearly identical and each Charter marked the same 32 requirement options (50% of the Charter) as not applicable. Justifications for the selections made were not documented.

**Potential for Inconsistent Application**

CMP # 1.17 and the PDMM promote consistency and standardization of project management. However, the PDMM also contains language that supports the ability
to vary policies and procedures and make project-dependent determinations which may cause confusion and inconsistencies with its application.

- **Special Situations:** Many processes and procedures in this manual are subject to variation as circumstances and experience warrant, subject to approval by Department Directors.

- **Mandatory Procedural Requirements.** Within the constraints above, this manual provides policies and procedures that are mandatory, recommended, and customary. It also provides a framework within which Directors can designate procedures which must be applied, on a project-by-project basis.

The PDMM does not consistently define which policies and procedures are mandatory (and not subject to variation) and which are dependent on the project or subject to variation. The PDMM indicates that the Charter is the document that defines the project’s requirements and it allows the project manager to select which items are and are not applicable to the project with no specificity as to which are mandatory, recommended, or customary. Justifications for selections made are not documented.

**Vague Language and Guidance**

The PDMM does not consistently provide clear direction to help determine how it should be applied. In addition to the language reported above, we also noted the following examples of language that may cause inconsistencies and confusion.

- **Contractor’s Payroll Compliance Reviews:** The contracting agency must visit the project site to conduct periodic interviews with some of the workers. It is the contracting agency’s responsibility to periodically review payrolls.

  The PDMM does not clearly define the quantity or frequency requirements for conducting employee interviews for comparison to payroll records.

  - For the 3 project files reviewed, we found 0, 1, and 2 completed interview forms. None of the files contained payroll records or evidence of reviews.

- **Project Phase Deliverables.** Deliverables document the completion of milestones, tasks, or activities for each phase of project development.

  For 3 deliverables: Communication, Quality, and Risk Management Plans - the PDMM indicates they are dependent upon the project’s category. However, the applicable categories for these deliverables were not identified.

  - None of the 3 files marked these deliverables as applicable to their projects.

**PDMM Committee**

CMP # 1.17 and the PDMM both contain direction to form a committee responsible for the ongoing review and revision of the PDMM to meet the needs of the City. We
learned that very few committee meetings have been held since the implementation of the manual. Formal meeting minutes were not taken, and there are no records of reported concerns or issues being discussed or resolved. Since its creation in September 2013, there have been no changes made to revise or improve the PDMM.

**Observation #3 Summary**

The PDMM’s policies and procedures are subject to variation and contain vague language and direction, which may lead to inconsistencies in its application or it not being used for all City projects. The PDMM Committee has not been used effectively to address user’s issues and concerns. No revisions have been made since the PDMM was completed in September 2013.

**Recommendation #3**

The PDMM Committee should consider a complete review of the PDMM to identify and revise areas that contain contradictory and/or unclear guidance. Section 1.2 of the PDMM indicates the purpose of the Project Development Process and Project Management Methodology is to provide one integrated process, one cohesive method, and one system of accountability. However, one all-inclusive manual may not be the most effective way to manage City-wide projects. If there are fundamental differences between Public Works and Utilities projects, or the applicability and direction provided by the Engineers Joint Contract Document Committee (EJCDC) and the American Institute of Architects (AIA), it may be more beneficial to consider separate project management manuals that reflect consistent City-wide processes when possible, but also provide guidance specific to individual areas.

The Committee should also evaluate the effectiveness of the current PDMM process improvement plan and consider alternatives for collecting feedback, determining the need for revision, updating the PDMM, and reporting the outcome to staff.

**Management’s Response**

Management concurs with the observations and recommendations. Processes are now in place to correct these deficiencies in the use of the PDMM. The PDMM should be reviewed and its usefulness and applicability to a variety of projects needs to be carefully considered.

**Responsible Party**

Dr. Jorge Garcia, Utilities Director  
Carl Clark, RES/TS Administrator

**Implementation Date**

Immediate
Utilities indicated that the following processes have been implemented to correct deficiencies and fully utilize the PDMM.

- Accounting staff has been assigned as the reviewer of project files to ensure completeness and compliance with the Project Charter.
- An external Contractor will be tasked with following the PDMM in full and providing feedback to Utilities management.

INHERENT LIMITATIONS

Because of the inherent limitations of internal controls, errors or irregularities may occur and not be detected. Also, projections of any evaluation of the internal control structure to further periods beyond the Audit Report date are subject to the risk that procedures may become inadequate due to changes in conditions, management override of internal controls, or that the degree of compliance with the procedures may deteriorate. This was a limited scope audit which only reviewed the areas stated in the Audit Objectives during the Audit Scope period. No representations of assurance are made to other areas or periods not covered by this audit.